

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION:	§	EXAMINER: Unknown
ELAN YOGESWAREN	§	
	§	
SERIAL NO.	§	GROUP ART UNIT: Unknown
	§	
FILED:	§	
	§	
FOR: ACOUSTIC SENSOR FOR	§	
DOWNHOLE MEASUREMENT	§	
TOOL	§	

Commissioner for Patents
P. O. Box 1450
Alexandria, Virginia 22313-1450

INFORMATION DISCLOSURE STATEMENT

Pursuant to Applicant's duty, under 37 C.F.R. § 1.56, 1.97 and 1.98, to disclose all relevant material, the Applicant lists below the following references believed to be relevant to the subject matter of the above-identified application:

	<u>U.S. Patent No.</u>	<u>Issue Date</u>	<u>Inventor</u>
1.	3,553,640	January 5, 1971	Zemanek
2.	4,382,201	May 3, 1983	Trzaskos
3.	4,485,321	November 27, 1984	Klicker, et al.
4.	4,523,122	June 11, 1985	Tone et al.
5.	4,571,693	February 18, 1986	Birchak et al.
6.	4,628,223	December 9, 1986	Takeuchi et al.
7.	4,665,511	May 12, 1987	Rodney et al.
8.	4,800,316	January 24, 1989	Ju-Zhen
9.	4,890,268	December 26, 1989	Smith et al.
10.	5,130,950	July 14, 1992	Orban et al.

11.	RE 34,975	June 20, 1995	Orban et al.
12.	5,469,736	November 28, 1995	Moake
13.	5,486,695	January 23, 1996	Schultz et al.
14.	6,213,250 B1	April 10, 2001	Wisniewski et al.
15.	6,467,140 B2	October 22, 2002	Gururaja

FOREIGN PATENT DOCUMENTS

	<u>Foreign Patent No.</u>	<u>Country</u>	<u>Issue Date</u>	<u>Name</u>
1.	2,156,984 A	UK	October 16, 1985	Rodney et al.

OTHER DOCUMENTS

1. McKeighen, R.E., "Design Guidelines for Medical Ultrasonic Arrays", SPIE International Symposium on Medical Imaging, Feb. 25, 1998.
2. Ohm, R.F., "The Vanderbilt Rubber Handbook, 13th Ed.", R.T. Vanderbilt Company, Inc., Nowalk, CT, 1990, pages 211-222.
3. Smith, W.A., "New Opportunities in Ultrasonic Transducers Emerging from Innovations in Piezoelectric Materials", SPIE Vol. 1733, 1992, pages 3-26.
4. Product Literature Obtained from Ohara Corporation, 23141 Arroyo Vista, Santa Margarita, CA, downloaded July 2003. <http://www.oharacorp.com/swf/ap.html>.
5. Product Literature obtained from Corning Glass Works Corporation, Houghton Park, New York, June 2003.
6. Product Literature "Dyneon Fluoroelastomer FE5623", obtained from Dyneon, Decatur, Alabama, June 2003.
7. Product Literature "Dyneon Fluoroelastomer FC2178", obtained from Dyneon, Decatur, Alabama, June 2003.

8. Product Literature "Dyneon Fluoroelastomer FC2181", obtained from Dyneon, Decatur, Alabama, June 2003.

9. Technical Information "Viton®B-50", DuPont Dow elastomers, dated December 1998, Wilmington, Delaware 19809.

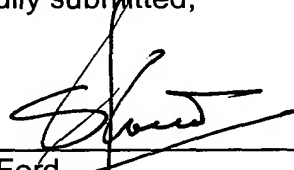
Applicant respectfully submits that the invention in the above-identified application is patentably distinguishable over the cited references known to Applicant and disclosed in the above Information Disclosure Statement.

This Information Disclosure Statement is being filed **within** three months of the filing date of this national application or the date of entry of the national stage as set forth in § 1.491 in an international application.

Respectfully submitted,

Date:

July 3, 2003



Stuart J. Ford
Reg. No. 37,486
PathFinder Energy Services, Inc.
15151 Sommermeyer St.
Houston, Texas 77041
(713) 996-1760 Telephone
(713) 996-1270 Facsimile
--Applicant--

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known Application Number Filing Date First Named Inventor Art Unit Examiner Name Attorney Docket Number		
Sheet 1 of 1				Elan Yogeswaren PAT023US		
U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No.	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code (if known)				
	AA	US-	3,553,640	01-05-1971	Zemanek	
	AB	US-	4,382,201	05-03-1983	Trzaskos	
	AC	US-	4,485,321	11-27-1984	Klicker, et al.	
	AD	US-	4,523,122	06-11-1985	Tone et al.	
	AE	US-	4,571,693	02-18-1986	Birchak et al.	
	AF	US-	4,628,223	12-09-1986	Takeuchi et al.	
	AG	US-	4,665,511	05-12-1987	Rodney et al.	
	AH	US-	4,800,316	01-24-1989	Ju-Zhen	
	AI	US-	4,890,268	12-26-1989	Smith et al.	
	AJ	US-	5,130,950	07-14-1992	Orban et al.	
	AK	US-	RE 34,975	06-20-1995	Orban et al.	
	AL	US-	5,469,736	12-28-1995	Moake	
	AM	US-	5,486,695	01-23-1996	Schultz et al.	
	AN	US-	6,213,250 B1	04-10-2001	Wisniewski et al.	
	AO	US-	6,467,140 B2	10-22-2002	Gururaja	
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		Country Code-Number-Kind Code				
	AP	GB-2,156,984-A		10-16-1985	Rodney et al.	
OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS						
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published				T ¹
	AQ	McKeighen, R.E., "Design Guidelines for Medical Ultrasonic Arrays", SPIE International Symposium on Medical Imaging, Feb. 25, 1998.				
	AR	Ohm, R.F., "The Vanderbilt Rubber Handbook, 13 th Ed.", R.T. Vanderbilt Company, Inc., Nowalk, CT, 1990, pages 211-222.				
	AS	Smith, W.A., "New Opportunities in Ultrasonic Transducers Emerging from Innovations in Piezoelectric Materials", SPIE Vol. 1733, 1992, pages 3-26.				
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	AU	Product Literature Obtained from Corning Glass Works Corporation, Houghton Park, New York, June 2003.				
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	AW	Product Literature "Dyneon Fluoroelastomer FC2178", obtained from Dyneon, Decatur, Alabama, June 2003.				
	AX	Product Literature "Dyneon Fluoroelastomer FC2181", obtained from Dyneon, Decatur, Alabama, June 2003.				
	AY	Technical Information "Viton®B-50", DuPont Dow elastomers, dated December 1998, Wilmington, Delaware 19809.				
Examiner Signature					Date Considered	
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication with applicant. ¹ Applicant is to place a check mark here if English language Translation is attached.						